



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

*Am*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,422	07/10/2001	Andrew R. Golding	10984-536001 / P264	7673
26161	7590	03/24/2005	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			OSBORNE, LUKE R	
			ART UNIT	PAPER NUMBER
			2163	
DATE MAILED: 03/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/902,422	<b>Applicant(s)</b> GOLDING ET AL.	
	<b>Examiner</b> Luke Osborne	<b>Art Unit</b> 2163	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/13/01</u> . | 6) <input type="checkbox"/> Other: _____  |

*TU*

## **DETAILED ACTION**

### ***Specification***

1. The use of the trademark Lycos, Yahoo, Google has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

2. Applicant is advised that should claims 2, 3 be found allowable, claims 15,16 (respectively) will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Art Unit: 2163

3. Applicant is advised that should claims 5, 6, 7 be found allowable, claims 17, 18, 19 (respectively) will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

4. Applicant is advised that should claim 4 be found allowable, claim 20 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

5. Applicant is advised that should claim 14 be found allowable, claim 37 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 1-28 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. For a claimed invention to be statutory, the claimed invention must be within the technological art. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological art fail to promote the “progress of science and the useful arts” (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a method claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In *Bowman* (Ex parte *Bowman*, 61 USPQ2d 1665, 1671 (BD. Pat. App. & Inter. 2001) (Unpublished), the board affirmed the rejection under U.S.C. 101 as being directed to non-statutory subject matter. Although *Bowman* discloses transforming physical media into a chart and physically plotting a point on said chart, the Board held that the claimed invention is nothing more than an abstract idea, which is not tied to any technological art or environment.

In the present case, although claim 1 recites at the preamble A popularity predicting process for determining the popularity of a text-based object, the steps in the claim body of a query analysis process for analyzing a query to determine a plurality of links to Internet objects relating to said query; a link weighting process for determining the individual link strength of each of said plurality of links, thus generating a plurality of link strengths; and a link strength summing process for determining the sum of said plurality of link strengths, wherein said sum corresponds to the popularity of said text-based object, can be implemented by the mind of a person or by the use of a pencil and paper. In other words, since the claimed invention, as a whole, is not within the technological arts as explained above, these claims only constitute an idea and does not apply, involve, use, or advance the technological arts, thus, it is deemed to be directed to non-statutory subject matter.

7. Claims 15, 17, 20, 37 contain the substantial duplicate limitations of claims 2, 5, 4, 14 (respectively) and are rejected under 101 for the same reasons as claim 1.

8. In the present case, although claim 29 recites at the preamble a computer program product residing on a computer readable medium having a plurality of instructions stored thereon which, when executed by the processor, cause that processor to, the steps in the claim body of analyze a query to determine a plurality of links to Internet objects relating to the query; determine the individual link strength of each of the plurality of links, thus generating a plurality of link strengths; and determine the sum of the plurality of link strengths, wherein this sum corresponds to the popularity of the text-based object, can be implemented by the mind of a person or by the use of a

Art Unit: 2163

pencil and paper. In other words, since the claimed invention, as a whole, is not within the technological arts as explained above, these claims only constitute an idea and does not apply, involve, use, or advance the technological arts, thus, it is deemed to be directed to non-statutory subject matter.

9. Claims 15, 17, 20, 37, 38 contain the duplicate limitations of claims 2, 5, 4, 14, 14 (respectively) and are rejected under 101 for the same reasons as claim 1.

10. In the present case, although claim 40 recites at the preamble a popularity predicting process for determining the popularity of a text-based object, the steps in the claim body of a search engine for analyzing a query to determine a plurality of links to Internet objects relating to said query and for determining the individual link strength of each of said plurality of links, thus generating a plurality of link strengths; and a link strength summing process for determining the sum of said plurality of link strengths, wherein said sum corresponds to the popularity of said text-based object, can be implemented by the mind of a person or by the use of a pencil and paper. In other words, since the claimed invention, as a whole, is not within the technological arts as explained above, these claims only constitute an idea and does not apply, involve, use, or advance the technological arts, thus, it is deemed to be directed to non-statutory subject matter.

11. In the present case, although claim 42 recites at the preamble a popularity predicting process for determining the popularity of a text-based object, the steps in the claim body of an object conversion process for converting said text-based object into a query; a search engine for analyzing said query to determine a plurality of links to Internet objects relating to said query and for determining the individual link strength of each of said plurality of links, thus generating a plurality of link strengths; and a link strength summing process for determining the sum of said plurality of link strengths, wherein said sum corresponds to the popularity of said text-based object, can be implemented by the mind of a person or by the use of a pencil and paper. In other words, since the claimed invention, as a whole, is not within the technological arts as explained above, these claims only constitute an idea and does not apply, involve, use, or advance the technological arts, thus, it is deemed to be directed to non-statutory subject matter.

12. In the present case, although claim 44 recites at the preamble a popularity predicting process for determining the popularity of a text-based object, the steps in the claim body of an object conversion process for converting said text-based object into a query; and a search engine for analyzing said query to determine a plurality of links to Internet objects relating to said query and for determining the individual link strength of each of said plurality of links, thus generating a plurality of link strengths, can be implemented by the mind of a person or by the use of a pencil and paper. In other words, since the claimed invention, as a whole, is not within the technological arts as

Art Unit: 2163

explained above, these claims only constitute an idea and does not apply, involve, use, or advance the technological arts, thus, it is deemed to be directed to non-statutory subject matter.

Any claim not directly rejected on 35 U.S.C 101 stands rejected due to its dependency.

13. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C 101(nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-8, 10-29, 33, 37-45 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,835,087 to Herz et al., hereafter "Herz".

Regarding claim 1 Herz teaches a popularity predicting process for determining the popularity of a text-based object. See Figures 2, 5, 11, 12, 16 and the corresponding

portions of Herz's disclosure for this teaching. In particular, Herz teaches "A popularity predicting process for determining the popularity of a text-based object, comprising:

- a query analysis [Column 4, line 49 – Column 5, line 6] process [Figure 12, item 1201] for analyzing a query to determine a plurality of links to Internet objects [target data objects] relating to said query;
- a link weighting process for determining the individual link strength of each of said plurality of links, thus generating a plurality of link strengths [Figure 12, item 1202]; and
- a link strength summing process for determining the sum of said plurality of link strengths, wherein said sum corresponds to the popularity of said text-based object [Figure 12, item 1203]" as claimed.

Regarding claim 2, Herz teaches the popularity predicting process of claim 1 "wherein said link weighting process includes a click analysis process for determining a link use statistic [Especially in systems where users can choose whether or not to retrieve a target object, a target object's popularity (or circulation) can be usefully measured as a numeric attribute specifying the number of users who have retrieved that object. (Column 12, lines 12-16)] for each of said plurality of links, wherein the link use statistic of each said link affects the strength of that link" as claimed.

Regarding claim 3, Herz teaches the popularity predicting process of claim 2 "wherein said link use statistic is an integer specifying the number of times that that link

Art Unit: 2163

was used prior to said query analysis process analyzing said query [Especially in systems where users can choose whether or not to retrieve a target object, a target object's popularity (or circulation) can be usefully measured as a numeric attribute specifying the number of users who have retrieved that object. (Column 12, lines 12-16)]" as claimed.

Regarding claim 4, Herz teaches the popularity predicting process of claim 1 "wherein said link weighting process includes a content analysis process for analyzing the relevancy between each of said plurality of Internet objects and said query [Relevance Feedback (Column 17, line 15 – Column 18, line14)], wherein the relevancy value of each said Internet object affects the strength of the link to that Internet object" as claimed.

Regarding claim 5, Herz teaches the popularity predicting process of claim 1 "wherein said link weighting process includes a link structure analysis process for analyzing the quality [A target object may also receive explicit numeric evaluations (another kind of numeric attribute) from various groups, such as the Motion Picture Association of America (MPAA), as above, which rates movies' appropriateness for children, or the American Medical Association, which might rate the accuracy and novelty of medical research papers (Column 12, lines 24-30)] of each of said plurality of Internet objects, wherein the quality value of each said Internet object affects the strength of the link to that Internet object" as claimed.

Regarding claim 6, Herz teaches the popularity predicting process of claim 5 “wherein said link structure analysis process includes an incoming link analysis process for determining the number of objects linked to each of said plurality of Internet objects, wherein the incoming link value of each said Internet object is directly proportional to the number of objects linked to that Internet object [Important associative attributes for a hypertext document are the list of documents that it links to, and the list of documents that link to it (Column 12, lines 5-7)], wherein said incoming link value affects said quality value of that Internet object” as claimed.

Regarding claim 7, Herz teaches the popularity predicting process of claim 5 “wherein said link structure analysis process includes an outgoing link analysis process for determining the number of objects that each of said plurality of Internet objects is linked to, wherein the outgoing link value of each said Internet object is directly proportional to the number of objects that said Internet object is linked to [Important associative attributes for a hypertext document are the list of documents that it links to, and the list of documents that link to it (Column 12, lines 5-7)], wherein said outgoing link value affects said quality value of that Internet object” as claimed.

Regarding claim 8, Herz teaches the popularity predicting process of claim 1 “wherein each said link strength is a relevancy score [Figure 12, item 1202]” as claimed.

Regarding claim 10, Herz teaches the popularity predicting process of claim 1 "wherein said query is a text-based query and includes at least a portion of the text of said text-based object [a profile consisting of a collection of attributes, such that a user likes target objects whose profiles are similar to this collection of attributes, is termed a "search profile" or in some contexts a "query" or "query profile," (g.) a specific embodiment of the target profile interest summary which comprises a set of search profiles is termed the "search profile set" of a user, (Column 4, line 49 – Column 5, line 6)]" as claimed.

Regarding claim 11, Herz teaches the popularity predicting process of claim 10 "wherein said text-based object is a query [a profile consisting of a collection of attributes, such that a user likes target objects whose profiles are similar to this collection of attributes, is termed a "search profile" or in some contexts a "query" or "query profile," (g.) a specific embodiment of the target profile interest summary which comprises a set of search profiles is termed the "search profile set" of a user, (Column 4, line 49 – Column 5, line 6)]" as claimed.

Regarding claim 12, Herz teaches the popularity predicting process of claim 10 "wherein said text-based object is a document [a profile consisting of a collection of attributes, such that a user likes target objects whose profiles are similar to this collection of attributes, is termed a "search profile" or in some contexts a "query" or "query profile," (g.) a specific embodiment of the target profile interest summary which

comprises a set of search profiles is termed the "search profile set" of a user, (Column 4, line 49 – Column 5, line 6)]" as claimed.

Regarding claim 13, Herz teaches the popularity predicting process of claim 1. "wherein said plurality of links is a user-definable number of links and said popularity predicting process further comprises a link limitation process for defining said user-definable number of links [To prevent users from being flooded with responses, it may be desirable to limit the number of notifications each user receives to a fixed number: (Column 16 line 65 – Column 17 line 14)]" as claimed.

Regarding claim 14, Herz teaches the popularity predicting process of claim 1 "further comprising an object conversion process for converting said text-based object into said query [Figure 5, Column 4, line 49 – Column 5, line 6]" as claimed.

Claims 15-20 are rejected due to their duplication of claims 2, 3, 5, 6, 7, 4 (respectively).

Claims 21-28 refer to the method for the system of claims 1, 2, 4, 5, 6, 7, 10, 13 (respectively), thus are rejected for the same reasons as claims 1, 2, 4, 5, 6, 7, 10, 13.

Claim 29 refers to the computer program product of process claim 1, thus is rejected for the same reasons as claim 1.

Claim 33 refers to a processor and memory configured to perform the method of claim 1, thus is rejected for the same reasons as claim 1.

Regarding claim 37 Herz teaches a popularity predicting process for determining the popularity of a text-based object. See Figures 2, 5, 11, 12, 16 and the corresponding portions of Herz's disclosure for this teaching. In particular, Herz teaches "A popularity predicting process for determining the popularity of a text-based object, comprising:

- an object conversion process for converting said text-based object into a query [Figure 5, Column 4, line 49 – Column 5, line 6];
- a query analysis [Column 4, line 49 – Column 5, line 6] process [Figure 12, item 1201] for analyzing a query to determine a plurality of links to Internet objects [target data objects] relating to said query;
- a link weighting process for determining the individual link strength of each of said plurality of links, thus generating a plurality of link strengths [Figure 12, item 1202]; and
- a link strength summing process for determining the sum of said plurality of link strengths, wherein said sum corresponds to the popularity of said text-based object [Figure 12, item 1203]" as claimed.

Regarding claim 38 Herz teaches a popularity predicting process for determining the popularity of a text-based object. See Figures 2, 5, 11, 12, 16 and the corresponding

portions of Herz's disclosure for this teaching. In particular, Herz teaches "A popularity predicting process for determining the popularity of a text-based object, comprising:

- an object conversion process for converting said text-based object into a query [Figure 5, Column 4, line 49 – Column 5, line 6];
- a query analysis [Column 4, line 49 – Column 5, line 6] process [Figure 12, item 1201] for analyzing a query to determine a plurality of links to Internet objects [target data objects] relating to said query;
- a link weighting process for determining the individual link strength of each of said plurality of links, thus generating a plurality of link strengths [Figure 12, item 1202]" as claimed.

Regarding claim 39, Herz teaches the popularity predicting process of claim 38 "further comprising a link strength summing process for determining the sum of said plurality of link strengths, wherein said sum corresponds to the popularity of said text-based object [Figure 12, item 1203]" as claimed.

Regarding claim 40, Herz teaches a popularity predicting process for determining the popularity of a text-based object. See Figures 2, 5, 11, 12, 16 and the corresponding portions of Herz's disclosure for this teaching. In particular, Herz teaches "A popularity predicting process for determining the popularity of a text-based object, comprising:

- a search engine [Column 4, line 49 – Column 5, line 6] process [Figure 12, item 1201] for analyzing a query to determine a plurality of links to Internet

objects [target data objects] relating to said query and for determining the individual link strength of each of said plurality of links [Figure 12, item 1202], thus generating a plurality of link strengths; and

- a link strength summing process for determining the sum of said plurality of link strengths, wherein said sum corresponds to the popularity of said text-based object [Figure 12, item 1203]” as claimed.

Regarding claim 41, Herz teaches the popularity predicting process of claim 40 “wherein said search engine comprises:

- a query analysis process [Column 4, line 49 – Column 5, line 6] process [Figure 12, item 1201] for determining said plurality of links to Internet objects relating to said query; and

- a link weighting process [Figure 12, item 1202] for determining said plurality of link strengths” as claimed.

Regarding claim 42, Herz teaches a popularity predicting process for determining the popularity of a text-based object. See Figures 2, 5, 11, 12, 16 and the corresponding portions of Herz’s disclosure for this teaching. In particular, Herz teaches “A popularity predicting process for determining the popularity of a text-based object, comprising:

- an object conversion process for converting said text-based object into a query [Figure 5, Column 4, line 49 – Column 5, line 6];

- a search engine [Column 4, line 49 – Column 5, line 6] process [Figure 12, item 1201] for analyzing a query to determine a plurality of links to Internet objects [target data objects] relating to said query and for determining the individual link strength of each of said plurality of links [Figure 12, item 1202], thus generating a plurality of link strengths; and
- a link strength summing process for determining the sum of said plurality of link strengths, wherein said sum corresponds to the popularity of said text-based object [Figure 12, item 1203]” as claimed.

Regarding claim 43, Herz teaches the popularity predicting process of claim 42 “wherein said search engine comprises:

- a query analysis process [Column 4, line 49 – Column 5, line 6] process [Figure 12, item 1201] for determining said plurality of links to Internet objects relating to said query; and
- a link weighting process [Figure 12, item 1202] for determining said plurality of link strengths” as claimed.

Regarding claim 44, Herz teaches a popularity predicting process for determining the popularity of a text-based object. See Figures 2, 5, 11, 12, 16 and the corresponding portions of Herz’s disclosure for this teaching. In particular, Herz teaches “A popularity predicting process for determining the popularity of a text-based object, comprising:

- an object conversion process for converting said text-based object into a query [Figure 5, Column 4, line 49 – Column 5, line 6];
- a search engine [Column 4, line 49 – Column 5, line 6] process [Figure 12, item 1201] for analyzing a query to determine a plurality of links to Internet objects [target data objects] relating to said query and for determining the individual link strength of each of said plurality of links [Figure 12, item 1202], thus generating a plurality of link strengths” as claimed.

Regarding claim 45, Herz teaches the popularity predicting process of claim 44 “wherein said search engine comprises:

- a query analysis process [Column 4, line 49 – Column 5, line 6] process [Figure 12, item 1201] for determining said plurality of links to Internet objects relating to said query; and
- a link weighting process [Figure 12, item 1202] for determining said plurality of link strengths” as claimed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claim 9, 30-32, 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,835,087 to Herz et al., hereafter "Herz".

Regarding claim 9, Herz teaches the popularity predicting process of claim 8 where there is a relevancy score as discussed above.

Herz does not teach that the relevancy score is a percentage.

The Examiner takes official notice that expressing a score as a percentage was well known in the art at the time of applicant's invention.

It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to express the relevancy score as taught by Herz as a percentage.

The motivation to do so would have been to be able to represent the relevancy score in a normalized fashion.

Regarding claims 30 - 32, Herz teaches a computer program product of claim 29, and that Herz's system can be preformed by a computer.

Herz does not expressly teach that said computer readable medium is (Claim 30) Random access memory (RAM), (Claim 31) Read only memory (ROM), or (Claim 32) hard disk drive.

The Examiner takes official notice that a RAM, ROM, or a hard disk drive were well known design options at the time of Applicant's invention.

At the time of the invention It would have been obvious to a person having ordinary skill in the art to implement the system of Herz on a RAM, ROM, or a hard disk drive

The motivation to do so would have been to allow flexibility in the implementation to allow cost efficiency.

Regarding claims 34 – 36, Herz teaches a processor and memory of claim 33, and that Herz's system can be preformed by a computer.

Herz does not expressly teach that said processor and memory are (Claim 34) incorporated into a personal computer, (Claim 35) incorporated into a network server, or (Claim 36) incorporated into a single board computer.

The Examiner takes official notice that a personal computer, network server, or a single board computer were well known design options at the time of Applicant's invention.

At the time of the invention It would have been obvious to a person having ordinary skill in the art to implement the system of Herz on a personal computer, network server, or a single board computer.

The motivation to do so would have been to allow flexibility in the implementation to allow cost efficiency.

### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO form 892. In particular, US 5321833 A, Adaptive ranking system for information retrieval, US 5535382 A, Document retrieval system involving ranking of documents in accordance with a degree to which the documents fulfill a retrieval condition corresponding to a user entry, US 6018738 A, Methods and apparatus for matching entities and for predicting an attribute of an entity based on an attribute frequency value, US 6112203 A, Method for ranking documents in a hyperlinked environment using connectivity and selective content analysis, US 6144964 A, Methods and apparatus for tuning a match between entities having attributes. All speak to portions of the disclosed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke Osborne whose telephone number is (571) 272-4027. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LRO  
3/18/05



**UYEN LE**  
**PRIMARY EXAMINER**